UNCLASSIFIED

AD NUMBER AD390302 CLASSIFICATION CHANGES TO: UNCLASSIFIED FROM: CONFIDENTIAL LIMITATION CHANGES

TO:

Approved for public release; distribution is unlimited.

FROM:

Distribution authorized to U.S. Gov't. agencies and their contractors;
Administrative/Operational Use; 15 MAY 1967.
Other requests shall be referred to Assistant Chief of Staff for Force Development (Army), Washington, DC 20310.

AUTHORITY

31 May 1979, DoDD 5200.10; AGO D/A ltr dtd 29 Apr 1980

UNCLASSIFIED

AD NUMBER
AD390302
CLASSIFICATION CHANGES
TO: CONFIDENTIAL
FROM: SECRET
AUTHORITY 31 May 1970, DoDD 5200.10

THIS REPORT HAS BEEN DELIMITED

AND CLEARED FOR PUBLIC RELEASE

UNDER DOD DIRECTIVE 5200.20 AND

NO RESTRICTIONS ARE IMPOSED UPON

ITS USE AND DISCLOSURE.

DISTRIBUTION STATEMENT A

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED.

SECURITY MARKING

The classified or limited status of this report applies to each page, unless otherwise marked.

Separate page printouts MUST be marked accordingly.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U.S.C., SECTIONS 793 AND 794. THE TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.



DEPARTMENT OF THE ARMY OFFICE OF THE ADJUTANT GENERAL WASHINGTON, F.C. 20310



OACSFOR

AGAM-P (M) (19 Sep 67) FOR OT-RD-670268

4 October 1967

SUBJECT: Operational Report - Lessons Learned, Headquarters, II

Field Force Vietnam Artillery (1).

TO:

SEE DISTRIBUTION

"This comment committee : Commenter office the the Book Defense of the terror to the control of the Repionago feet. This will be to the control of the its transmission on the new but now his contents but normer to an abagahermed person is prohibited by law.

1. Subject report is forwarded for review and evaluation by USACDC in accordance with paragraph 6f, AR 1-19 and by USCONARC in accordance with paragraph 6c and d, AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.

2. Information contained in this report is provided to insure appropriate benefits in the future from Lessons Learned during current operations, and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY: ational control quarterly porion

Wit May 67

KENNETH G. WICKHAM Major General, USA The Adjutant General

DISTRIBUTION:

Commanding Generals

US Continental Army Command

US Army Combat Developments Command

Commandants

US Army Command and General Staff College

US Army War College

US Army Air Defense School

US Army Armor School

/ US Army Artillery and Missile School

US Army Aviation School

US Army Chemical School

US Army Civil Affairs School

US Army Engineer School

US Army Infantry School

US Army Intelligence School

REGRADED UNCLASSIFIED WHEN SPARATED FROM CLASSIFIED INCLOSURES

DDC ECNTRUL NC: 82410

s 47

DEPARTMENT OF THE ARMY
HEADQUARTERS II FIELD FORCE VIET AM ARTILLERY
APO San Francisco 96266

AVFB-FAC

15 MAY 1967

SUBJECT:

Operational Report - Lessons Learned for Quarterly Period Ending 30 April 1967 (RCS CSFCR - 65) (U)

THRU:

Commanding General II Field Force Vietnam APO 96266

THRU:

Commanding General

United States Army Vietnam

ATTN: AVHGC-DH APO 96307

THRU:

Commander in Chief US Army Pacific ATTN: GPOP-OT APO 96558

TO:

Assistant Chief of Staff for

Force Development
Department of the Army
Washington D. C. 20310

In compliance with Ak 1-19, 26 May 1966, the Operational Report-Lessons Learned for the period 1 February - 30 April 1967 is attached in sections I and II.

1 Incl

REGRADED UNCLASSIFIED WHEN SEPARATED FROM CLASSIFIED INCLOSURE(S)

Stone R. Allin, Jr.
GEORGE R. ALLIN, Jr.
Colonel, Artillery

GS-S-67

·

ARV675-1908 2711357

ACSFOR-RD File 8-07- SIND 670168

G4-C-C7- 1.570

C-E 67-1001

n 17

Commanding

SECRET

さいてきいない 日本の

s. 47

DEPARTMENT OF THE ARMY
HEADQUARTERS II FIELD FORCE VIETNAM ARTILLERY
APO SAN FRANCISCO 96266



OPERATIONAL REPORT - LESSONS LEARNED
QUARTERLY FOR PERIOD ENDING 30 APRIL 1967
(RCS CSFOR-65) (U)

G3-S-67____1771

S-67- HILL

ACSFOR-RD File 670267 (-4 67

1001

SECRE I

11 FFA LOG NO. 5-/638-67 Copy, No. 4 44

Regraded UNCLASSIFIED with separated from classified document.

ARV575-1908

2711357

COWNGRADED AT 3 YEAR INTERVED

DECLASSIFIED AFTER 12 YEAR,

COO DE \$200,10

DDC CONTROL NO. 82410

Section I - Significant Organization Activities

A. (FOUO) Administration/Personnel

1. Strength.

a. Meadquarters and Headquarters Battery, II Field Force Vietnam Artillery is organized under TOE 6-501E with an authorized and assigned strength as of 30 April as follows:

4	AUTHORIZI			ASSIGNE	D
<u>off</u>	MO	EM	OFF	MO	<u>em</u>
34	2	159	32	2	170

b. Headquarters Battery, 8th Target Acquisition Battalion, 25th Artillery is organized under TOE 6-575E with an authorized and assigned strength as of 30 April as follows:

Ā	UTHORIZ	<u>80</u>		SIGNED	
off	MO	<u>em</u>	OFF	WO	<u>em</u>
5	5	125	5	6	124

2. Gains and Losses.

a. Headquarters and Headquarters Battery, II Field Force Vietnam Artillery.

	<u>GA INS</u>			LOSSES	
<u>off</u>	MO	<u>em</u>	off	WO	<u>em</u>
24	2	78	27	2	82

b. Headquarters Battery, 8th Target Acquisition Battalion, 25th Artillery.

	GA INS			LOSSES	-
<u>off</u>	MO	<u>em</u>	OFF	WO	<u>em</u>
0	1	12	0	0	15

3. Casualties.

There were no casualties during the period.

FOR OFFICIAL USE ONLY

DDC CONTROL NO. S2110

4. Personnel Management.

- a. HQ, II Field Force Vietnam Artillery S-1 Section continued to perform administrative functions for the headquarters and to monitor personnel action for all units assigned and under operational command of this headquarters. Casualty reports and efficiency report ratings of OPCON units are channeled through this section.
- b. This headquarters sent two officers and four enlisted men on TDY with PROJECT OREGON for a period in excess of 90 days. The status of these individuals causes this headquarters to operate at reduced strength, as no replacements can be obtained while individuals are on TDY.

5. Rest and Recuperation Program.

The following out of country R&R trips were taken by members of this headquarters:

LOCATION	FEB	MAR	APR
Bangkok	9	5	12
Hong Kong	1	0	4
Tokyo	4	3	11
Taipei	1	4	3
Manila	0	0	1
Hawaii	3	3	3

This headquarters: R&R program operates within the allocations given to II FFORCEV.

6. Morale.

The morale of this organization continues to be outstanding.

7. Awards and Decorations.

a. The following awards and decorations were presented during the period.

Legion of Merit	3
Bronze Star Medal	19
Army Commendation Medal	15
Air Madal	4

4

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

b. This headquarters was delegated authority on 22 April 1967 to award the Bronse Star Medal and all lesser decorations to members of organizations listed below:

- (1) Headquarters and Headquarters Battery, II Field Force Vietnam Artillery
 - (2) 8th Target Acquisition Battalion, 25th Artillery
 - (3) 5th Battalion (AW)(SP), 2d Artillery
 - (4) Battery D (Machine Gum), 71st Artillery
 - (5) Battery I (Searchlight), 29th Artillery
 - 8. Discipline, Law and Order.

The following judicial and nonjudicial actions were conducted for assigned units during this reporting period:

Article 15

Summary Court-Martial 0

Special Court-Martial 2

9. Safety.

Two vehicle accidents occurred during the period.

10. Civil Affairs.

During this reporting period the Staff Chemical Officer continued to exercise staff responsibility for the S5 programs of the 23d and 54th Artillery Groups, and 5th Bn, 2d Artillery. The 23d and 54th Artillery Groups and the 5th Bn (AW)(SP), 2d Artillery under operational control of this headquarters have established and continue to support the civic action program in many areas, primarily in the self-help construction program and the MEDCAP and English instruction programs. The groups and battalions carry out their civic action activities in the vicinity of their base camps and, when feasible, while on operations. The civic action program of HHB II FFORCEV Attillery has continued with the distribution of food, clothing, and USAID supplies to Honai Van Coi, a village hamlet located four miles north of Bien Hoa on Highway 1. The supplies have been used for minor self-help construction projects. In addition, there is a continuing project of English instruction being given to the children and teachers of the Honai Van Coi Orphanage. The medical Civic Action Program (MEDCAP) has continued in Honai Van Coi. Due to a shortage of qualified medical personnel, the MEDCAP team visits there only once a week, as contrasted to twice a week during the last reporting period.

\$

FOR OFFICIAL USE ONLY

B. (S) Operations and Intelligence

1. (C) General

Operations and intelligence activities included many of the same projects reported in previous operational reports as well as initiation of several new projects. The plan for stationing of II FORCEV Artillery units was revised again and refinements were made in the Harassment and Interdiction program. Extension of survey control to US and ARVN artillery units continued and a recommendation was submitted to USARV for expansion of photogrammetric survey to other areas in the Corps Zone. The plan for providing artillery support for Special Forces camps and RF/PF outposts by II FFORCEV Artillery units was updated and continued emphasis was placed on the important assistance to RVN program.

- 2. (S) Changes in the Stationing and Missions of II Froncev Artillery Units. (For current plan see Inclosure 1)
- a. Batteries H and I (SIF), 29th Artillery arrived in the Republic of Vietnam on 27 March 1967 and were assigned to II FFORCEV.
- (1) Battery H was further attached to the 9th Infantry Division and staged at BEAR CAT becoming operational on 5 April 1967. The battery (- one platoon) deployed to the IV CTZ on 13 April 1967 under the operational control of the Senior ..dvisor, IV CTZ in accordance with MACV Secret message 03766, DTG 311225Z Jan 67, Subj: Artillery Mix in RVN (U). The other platoon deployed to DONG TAM on 15 April to support the 9th Infantry Division in that area.
- (2) Battery I was attached to the 5th Battalion (AWSP), 2d Artillery and staged at their base camp area in LONG BINH, becoming operational on 4 April 1967. One platoon each deployed in support of the 1st, 9th and 25th Infantry Divisions.
- b. The advance party of the 1st Battalion, 27th Artillery (155mm SP) arrived in country on 2 April 1967 with the main body arriving on 12 April. The battalion was assigned to the 23d Artillery Group and it is expected to become operational about 1 May 1967. The elements of the battalion will be deployed to PhU LOI, TAY HINH and DAU THING replacing the 2d Battalion, 11th Artillery (155mm T).
- c. The 2d Battalion, 11th Artillery (155mm T), which is assigned to the 23d Artillery Group, deployed to I CTZ on 19 April 1967. This deployment occurred in conjunction with Operation OREGON and the battalion will remain in the I CTZ for an indefinite period.
- d. Headquarters and Headquarters Battery, 2d Battalion, 32d Artillery (8"/175mm SP) moved to TAY NINH from CU CHI 17 April 1967. The Service Battery will also complete this move by 1 May. The relocation was made in order to place the Headquarters and Service units of the 2d Bn, 32d Arty

SECRET

CONFIDENTIAL

in the vicinity of two of its firing units. Additionally, the battalion is now responsible for control of fires in the TAY NINH area.

3. (C) Air Defense Weapons in a Ground Support Role

The four firing batteries of the 5th Battalion (AW) (SP), 2d Artillery remained attached to the 1st and 25th Infantry Divisions. Each battery consisted of both M-42 twin 40mm guns and M-55 quad .50 machine guns. They were employed exclusively in a ground role to provide perimeter and convoy security and on search and destroy missions.

- a. Toward the end of the period Battery C was detached from the lst Infant: Division and attached on 24 April to the 9th Infantry Division, giving each of the three divisions one battery as originally planned.
- b. While Battery D remained attached to the 25th Infantry Division, in addition to Battery B, four 14-42's and four M-55's were detached from Battery D to provide security for a heavy battery at SUOI DA.
- c. Both the M-42 and M-55 have proven very effective when utilized on perimeter security and convoy security missions. The ability to helilift the M-55 proved invaluable for additional fire power at temporary base camps and artillery fire support bases. The M-42, when used as a maneuver vehicle on search and destroy missions, developed serious maintenance problems. In comparison to a tank, the M-42 is not as heavily constructed, with the armor plating and overall weight considerably lighter. The M-42 is powered by a gasoline engine rather than the diesel engine of a tank and extended driving at low speed through difficult terrain causes excessive wear on the engine and transmission.
- d. USARV has conducted a study considering the trade-off of some M-42's for additional quad .50 machine gun batteries. In a Confidential letter to II FFORCEV dated 29 March 1967, Subject: Acquisition of Additional Quad .50 Machine Gun Batteries (U), this headquarters recommended that no change in composition of the 5th Bn (AWSP), 2d Artillery be made until more experience is gained under all weather conditions. This recommendation was forwarded to USARV by II FFORCEV.

4. (C) Harasament and Interdiction (H & I) Program

During this reporting period, a continuing study to improve the program resulted in two modifications.

a. The time delay in receipt of intelligence from six widely separated sources was reduced by adding this headquarters as an addressee to their electrically transmitted INTSUMS. Previously, only hard copy INTSUMS from these sources had been received through normal distribution channels.

b. The time required to clear targets for firing through both US and ARVN channels has been excessive. Although former procedures allowed for rapid clearance of a few selected targets, based on intelligence received after the daily program had been finalized, the formal time required for the M&I program was about 36 hours. All H&I targets are now selected, cleared, and fired the same day and there has been no problem on obtaining clearances.

5. (S) Support of Special Forces and RF/PF Outposts

During this period II FFCRCEV Artillery updated plans for support of Special Forces and RF/PF outposts. All units of II FFCRCEV Arty have been furnished a list of SF and critical RF/PF outposts in III CPZ and responsibilities for providing these outposts fire support have been assigned. Designated units will provide fire support from base camp locations to outposts within range. Units have made plans for displacing by land or by air to preselected firing positions in order to provide artillery fire support to outposts not within range of base camps.

6. (S) Assistance to ARVN

II FFCRCEV Artillery continued to emphasize the assistance to ARVN program; artillery support was provided upon request, frequent liaison visits were made and instruction on artillery adjustment was conducted for many ARVN and RF/PF forces.

- a. As mentioned in paragraph 5 above, the program for providing artillery support to remote RF/PF outposts and SF camps has been updated. This headquarters has also assisted ARVN units in establishing a similar program. One 105mm battery of the 5th ARVN Division has received the ground portion of training in helilift operations. This battery will conduct actual operations in the near future. The 18th and 25th ARVN Divisions will also be incorporated into this program later.
- b. In addition to providing artillery support from base camp locations on a continuing basis, II FORCEV Artillery units displaced in support of ARVN operations on eleven different occasions.
- c. Instruction of RF/PF personnel continues to be an important part of the assistance to ARVN program. During this reporting period the following actions were accomplished:
- (1) Officers from FSCE nede a follow-up visit to LONG AN Sector headquarters for quarterly refresher training for RF/PF forces who had received observed fire training in January 1967.
- (2) Observed fire instruction for twenty kF personnel from NUOC VANG outpost in the vicinity of PHUOC VINK was conducted by members of the 6th Battalion, 27th Artillery.

SECRET

- (3) Personnel from the FSCE met with the 5th ARVN Division Artillery Commander and his US advisors on 1 April concerning US artillery support for the one hundred eighty-nine RF/PF outposts in the 5th Division TAOR. A program has been established whereby officers from FSCE will accompany training teams and assist in teaching RF/PF personnel to better utilize the artillery support available.
- c. This headquarters continues an active program of liaison visits by the Commanding General, Deputy Commander, and members of the S-3 section to ARVN artillery headquarters. The III Corps Artillery Advisor makes frequent visits to this headquarters and, through the II FFORCEV Artillery Liaison Officer to III ARVN Corps, both headquarters are provided information concerning present and future artillery employment. The 23d and 54th Artillery Groups also conduct regular liaison visits to the ARVN Divisions in their respective areas and close coordination is maintained.

7. (C) Programs to Increase the Accuracy of Artillery

II FFORCEV Artillery continues to emphasize the need for accuracy in the employment of artillery. The meteorological, survey and calibration programs have been stressed continuously in order to provide the most accurate data to the units in II FFORCEV.

a. Artillery Ballistic Meterology (Metro)

(1) During this reporting period the 1st Division Artillery's metro section became operational at PHU LOI and the 9th Infantry Division Artillery Metro Section moved from BEAR CAT to DONC TAM (IV CTZ). A current 1st of metro sections and their locations is as follows:

(a)	lst Inf Div Arty	PHU LOI
(b)	9th Inf Div Arty	DONG TAM
(c)	25th Inf Div Arty	CU CHI
(b)	6/274 Arty th	PHUOC VINH
(e)	8/25AArty (TAB) Sec A	QUAN LOI
(f)	8/25 Arty (TAB) Sec B	LONG BINH
(g)	2/32d Arty	TAY NINH
(h)	2/35th Arty	XUAN LOC
(i)	1/83d Arty	NUI DAT
(j)	1/27th Arty	To be deployed to DAU TIENG

SECRET



- (2) Plans have been made to deploy metro sections concurrently with the artillery units that will occupy the BEN LUC and HAM TAN firing positions. When operational, these metro sections will provide additional coverage over a large portion of the III CTZ not previously covered.
- (3) An army-wide shortage of radiosondes has existed for the past five or six months. On 25 January 1967, this headquarters received information from USARV that this shortage might become more acute in the next few months. A program was initiated during this period whereby certain metro sections flew only two electronic flights per day. A visual sighting was made between each electronic flight providing supplemental information for the preparation of the MET message disseminated every six hours to using units. This practice was initiated during the dry season in order to conserve radiosondes for the monsoon season beginning in late April. With the decrease in usage of radiosondes and the filling of back requisitions, sufficient radiosondes are now on hand to resume four electronic flights per day at all metro sections. If requisitions continue to be filled the shortage of radiosondes will be eliminated in II FFORCEV.

b. Calibration of Artillery Pieces

- (1) During this reporting period 136 of 426 US and 54 of 136 ARVN artillery pieces were calibrated. The 177th Ordnance Detachment Calibration Team provides this calibration support for all the artillery pieces in RVN. The team spends fifteen days of each month with II FFORCEV Artillery in III CTZ and the remaining fifteen days with I FFORCEV Artillery.
- (2) Since the initiation of this calibration program in June 1966, 570 US and 142 ARVN artillery pieces have been calibrated. The volume of firing in a combat situation and the replacement of unserviceable tubes necessitates more frequent calibration than the annual requirement. The wide dispersion of artillery units and the fact that the team must divide its time between II FFORCEV Artillery and I FFORCEV Artillery makes it difficult for the calibration team to meet committments. Artillery units do not always receive timely calibration.
- (3) The addition of four artillery battalions in the next quarter will add 66 artillery pieces for a total of 492 US artillery pieces in the III CTZ. If troop programs permit, a calibration team should be made available to IT FFORCEV on a permanent basis.

c. Survey

(1) Since the Corps Artillery program was initiated, survey control has been extended to all US/FWMAF base camps and to all but four ARVN artillery platoons, to which survey will be completed soon. The current status of survey control in III CTZ is shown at Inclosure 3. Future plans are to assist the artillery groups/division artilleries as required and to further extend survey control in III and IV CTZ's.

CONFIDENTIAL

(2) The previous report described a proposal to supplement existing survey control in III CTZ by an application of photogrammetry. A test of the concept was conducted during the period 31 January - 4 April 1967 by II FFORCEV Artillery and 1st and 25th Division Artillerys with highly satisfactory results. Accuracies comparable to conventional survey were obtained, resulting in rounds saved in adjustment, ability to mass fires, and for the first time in Vietnam, a limited target area survey capability. The test report is at Inclosure 4. Results of this test have been forwarded to CG USARV with the recommendation that this process be adopted and used to extend control to all inaccessible areas of III CT2.

8. (C) Safeguarding Aircraft from Friendly Artillery Fires

The FSCF continued to monitor the courdination of air space between air and artillery in the III CTZ. The current regulation concerning broadcast of warnings to aircraft of artillery firing was an inclosure to the last operational report of this headquarters. Based on experience gained during the last quarter of calendar year 67, this regulation has been revised to cover a greater portion of IIICTZ, to realign areas assigned to Air Warning Control Centers to take advantage of identifiable terrain features, and to improve procedures for passing warnings to aircraft. This revision prescribes that pilots will request route clearance rather than information on all artillery firing in a given area. Also the revision will improve the procedures for safequarding high performance aircraft.

9. (U) US/ARVN Standardization of Terminology and Procedures

FSCF corrdinated with Deputy Senior Advisor, (DSA), III CTZ, on a project to standardize definitions and procedures pertaining to the assignment of tactical areas and the clearing of artillery fires and air strikes. A draft document which defines terms and prescribes procedures has been prepared and will be published as a joint II FFORCEV/III Corps Directive after further staffing by the two headquarters.

10. (C) Communications

り

- a. The II FFORCEV Artillery Communications Section continued its mission of coordinating the installation and operation of VHF, AM and FM communication facilities. With an increase in tactical operations during this reporting period, many UHF lines were established as units occupied various temporary locations or new base camp positions. The 5th Battalion (AWSP), 2d Artillery became operational in December 1966 and entered the II FFORCEV Artillery RATT net in February 1967. New VHFTT links to the 23d and 54th Artilllry Groups were established during this period, providing more reliable communications during all types of weather conditions.
- b. The number of classified messages processed through the II FFORCEV Artillery message center increased from 3000 last reporting period to 4000 this period.

11

CONFIDENTIAL

11. (S) Aircraft for Artillery Units

- a. The adverse effect of inadequate organic aviation on the commanders' ability to influence actions of their widespread units, on the quality of reconnaissance and survey operations and on administration and logistical support has been cited in all previous operational reports. The efforts made by this headquarters to obtain additional aircraft was also discussed. With the arrival of two additional artillery battalions in June, this problem will become more acute.
- b. Experience gained thus far in the Republic of Vietnam indicates that fully effective artillary operations are not feasible without aircraft organic to groups and battalions. The required number of aircraft for II FFORCEV Artillary is in Section II, Part II under "RECOMMENDATIONS".

12. (S) Requirements for Additional Counter-Mortar Radar Sets

- a. The need for additional counter-mortar radars in the III CTZ has been stressed in all previous operational reports. With the arrival of more troop units and the establishment of more base camps, the requirement for these sets has increased; frurty-three additional radar sets are now needed in II Field Force Vietnam.
- b. Section I, paragraph 6, of the last operational report discussed a study illustrating the effectiveness of these countermortar radars when utilized in locating enemy mortar positions. During the period 1 Harch to 19 April 1967, 166 mortar attacks were reported, delivering approximately 4,012 rounds of 60, 81 and 82mm mortars, and resulting in 142 KIA and 565 WIA. It is apparent that there is an increasing need for more counter-mortar radar detachments. If the current review of the over-all force structure should develop additional spaces, a high priority should be given to providing 43 more counter-mortar radar detachments for the III CTZ.

SECRET

Section II, Part I - Observation/Lessons Learned

SURVEY OPTICAL SIGHTINGS

Item: Adverse weather conditions aftecting optical sightings in III CTZ.

Discussion: During the months of February, March and April, long distance sighting (in excess of 30 kilometers) should not be planned. Between the altitudes of 300-2000 feet, the atmosphere is generally obscured by a dense haze of smoke, mist and dust. Line of sight is usually limited to 10-30 kilometers. Occasional periods of rainfall temporarily clear the atmosphere and improve observation.

Observation: The weather in III CTZ must be considered when planning survey operations that require optical sightings in excess of 30 kilometers.

EMPLOYMENT OF THE M-42 TWIN 40mm GUN

Item: Utilization of the M-42 as a maneuver vehicle on search and destroy missions.

Discussion: As discussed in Section I, paragraph B3, the M-42 develops serious maintenance problems when used as a maneuver vehicle on search and destroy missions. In-country direct support maintenance facilities are extremely limited and repair parts for the M-42, out of production for over ten years, are in short supply. The following is a summary of major maintenance required to date comparing the M-42's used primarily as a maneuver vehicle vs the M-42's when used primarily on other missions.

BATTERIES	ENGINES REQUIRING REPLACEMENT	TRANSMISSIONS REPLACED	FINAL DRIVES REPLACED	ROAD WHEELS REPLACED
A&C (Maneuver)	41	8	6	82
B&D (Non-maneuver) 5	2	1	14

Observation: The M-42 can best be used for perimeter and convoy security and on blocking force missions. The weapon can also provide effective H&I fires. Considering the maintenance facilities available and the construction of the M-42, these weapons should not be used on search and destroy missions.

BATTERIES BA-200/U

Item: Problems encountered with the BA-200/U in the Republic of Vietnam.

<u>Discussion:</u> Patteries BA-200/U are in short supply in the Republic of Vietnam. Due to the extreme heat and humidity encountered in RVN these batteries have a short life expectancy. This headquarters has a common use for these batteries in the SB-86 Switchboard and has utilized wet cell batteries in lieu of BA-200/U batteries. The wet cell batteries should be arranged to provide 24 VDC.

Observation: Utilizing wet cell batteries in place of the dry tattery, EA-200/U, eliminates the problem of frequent replacement and is an economical expedient since the wet cell batteries can be periodically recharged and will function for an injefinite length of time.

AM FREQUENCIES

Item: Utilization of AM frequencies between 2-3 MC.

Discussion: Many units are assigned tactical AM frequencies between 2-3 MC, and are experiencing difficulty in maintaining communications over relatively short distances. This is particularly true of those units utilizing radio sets AM/GRC-19 and Radio TT Set AM/GRC-46. It appears the five section whip antenna is extremely poor in the 2-3 MC range, radiating only about 1/7 of the maximum available power of either of the two sets.

<u>Ctservation</u>: This headquarters has found that the doublet antenna is test for this communications equipment. Properly matched, the doublet will radiate all of the available power.

PERIMETER SECURITY

Item: Employment of searchlights and automatic weapons.

<u>Discussion:</u> As discussed in Section I, paragraph B2, the searchlight platoons deployed during this reporting period in support of the divisions. The majority of the searchlights are being used for perimeter security at base camps and fire support bases. Each platoon has an organic light direction center (LDC) which is similar to a fire direction center. The lights are directionally controlled by azimuth and elevation commands received from the LDC. The M-42's and M-55's of the 5th Battalion, 2d Artillery can also be directionally controlled by azimuth and elevation commands. Therefore, upon discovering a target using infra-red, the searchlight (LDC) can easily transfer data to the M-42's or M-55's for responsive fire support.

Observation: The searchlight provides the automatic weapons with a much needed night acquisition capability.

14

CONFIDENTIAL

Section II, Part 2 - Recommendations

A. (C) Radio Set AN/CRC-16.

During this reporting period the communications section of II FFORCEV Artillery experienced difficulty in keeping AN/CRC-46's operational. The age of the radios and lack of spare parts contributed to the problem; however, the major factor is the over-heating of the radios. Tests conducted by this headquarters show the average ambient temperature incide the vans (Electrical Equipment Shelter S-89 C/G) to be approximately 140 degrees F. Thenever possible radios have been removed from the vans and placed in tunkers, lessening the ambient temperature somewhat, however, this action is not always possible. The installation of an air conditioner in the equipment van would reduce ambient temperature and make the AN/CRC-46 much more reliable. The replacement of AN/GRC-46's with the new radio sets AN/CRC-142 and 122 will eliminate part of the problem with the AN/CRC-46.

RECCIMENDATION:

That air conditioning be made available and authorized for installation in the Electronic Equipment Shelter S-89 C/G and that the issue of the new radio sets AM/GRC-142 and 122 be expedited.

B. (S) Countermortar Radar Sets.

As mentioned in all previous Operational Reports and in Section I, raragraph E14, there is a definite need for 43 additional countermortar detachments previously incorporated in the Troop Program.

RECOMMENDATION:

That if the review of the overall force structure should develop additional spaces, a high priority be given to reinstating the required countermortar radar detachments into the troop program.

C. (S) Aircraft for Artillery Units.

As stated in Section I, paragraph P13, and recommended in other previous Operational Reports, the full potential of the artillery in III CTZ will not be realized until adequate aircraft support is provided.

RECOMMENDATION:

That, as a matter of high priority, II FFORCEV Artillery be provided with aircraft on the following basis:

- (1) Force Artillery Headquarters: Four UH-1's and three C-1's.
- (2) Croup Headquarters: Three C-1's, two OH-13's and one U-6.
- (3) Artillery Battalion: Two C-1's and one OH-13.

SECRET

D. (C) Application of Photogrammetry to Survey.

In Section I, paragraph B7c, the application of photogrammetry to provide survey control points was discussed. The results of the test were entirely successful and further expansion of this program would provide needed survey control in areas of operations in III CTZ.

RECOMMENDATION:

That the photogrammetric survey control program be adopted and expanded to include all areas in III CTZ with priorities to LONG AN, HAU MGHIA, BINH DUONG, PHUOC TUY and LONG KHAMH Provinces.

E. (C) Calibration of Artillery Pieces.

A calibration team on a full time basis is required by II FFORCEV Artillery. The present calibration team furnishes adequate support for US artillery units; however units do not always receive calibration when desired due to the team's absence or the changing tactical situation.

RECOMMENDATION:

That a calibration team be provided to directly support II FFORCEV Artillery on a permanent basis.

GEORGE R. ALIN, Jr. Colonel, Artillery

Commanding

19

LOCATION	SH	AS OF 31 JAN 67	AS OF 30 APRIT, 67	(FLANNED AS OF 30 JUNE 67)
BENG CAT	7/9th Arty (3	(105m T)	7/9th Arty (105mm T)	units in parentheses 7/9th Arty (105mm 1/
	Btry B, 1/834	1/83d Arty (8"/175== SP)	Stry B, 1/60d Arty (8"/179mm SP)	
			Btry C, 5th Bn (MMSP), 2d Arty	Btry C, 5th Bn (AWSP), 2d Arty
			1 Pit, Etry I (SLf), 29th Arty	1 Pit, Atry I (SLT), 29th Arty
				WHE, Svc, 1 FB, 7/8th Arty (8"/175mm SP) (June 67)
				1 FB, 3/16th Arty (155mm T) (June 67)
BEN LUC				1 FB, 7/8th Arty (8"/175mm SP) (June 67)
BIEK HOA	Ocry c, 2/358	5ch Arty (155mm 3P)		
				HHB, Svc, Stry A, 3/16th Arty (155mm T) (June 67)
CQ CHI	HHB, Svc, Btr (8"/175mm ?P)	Svc, Btry A, 2/32d Arty 175mm (P)	8try A, 2/32d Arty (8"/172m SP)	Btry A, 2/32d Arty (8"/175muSP)
			Btry B, 5th Be (AWSP), 2d Arty 1 Pit. Btry I (SET), 20th Annual	8try 8, 5th En (ASP), 2d Arty
Incl 1 cylin		22 cg	SECRET "4-S-67-1672	

	7		
LOCATION	45 OF 31 JAN 67	AS OF 30 APRIL 67	(PLINNED AS OF 36 JUNE 67) (Arrival month of incoming units in perentheses,
DAU TIENG	Biry B, 2/11th Arty (155m: \underline{I}) (see note)		1 73, 1/27th Arty (155m SP) (7by 67)
YVAL BING		1 Plt, Btry H (SLf.), 29th Arty	1 Pit, Biry if (SLT), 29th Arty
			1 FB, 7/8th Arty (8"/175mm 9P) (June 6?)
Co dau ha	Btry C, 2/11th Arty (155mm T) (see note)		
MAM TAN			1 FB, 1/83d Arty (8"/175mm 6P)
LAT KNEE	Btry B, 2/32d Arty (6"/175mm SP)		
	Btry A, 6/27th Arty (8"/175mm SP)		
Long Binh	EB, 6/25th Arty (TAB)	HHB, 9/25tb Arty (TAB)	HHB, 8/25th Arty (TAE)
	Svo, 6/27th Arty	Svc, 6 /27th Arty	Svc, 6/27th Arty
	Svo, 2/35th Arty	Svc, 2/35th Arty	Svc, 2/35th arty
	FIRD, 5th Bn (ANSP), 2d Arty	HIB, 5th Br (AMSF), 2d Arty	fffB, 5th B. (ANSP), 2d Arty
		Hq, Btry I (SLT), 29th Arty	119, Stry I (SLT), 29th Arty
LONG GIAC			1 FB, 3/16th Arty (155mm f) (June 67)

18

Cy#10/22.45

SECRET

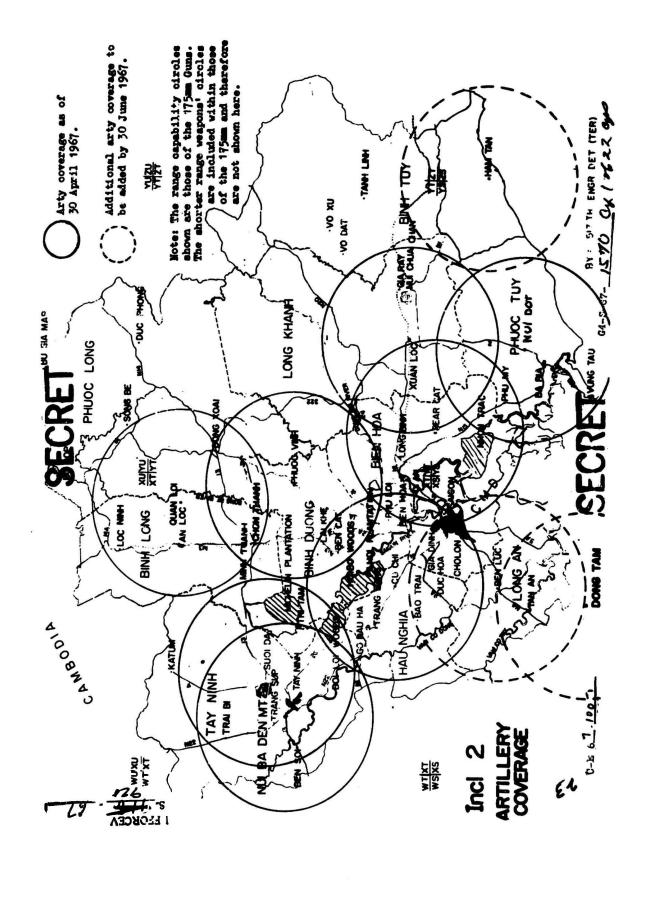
LOCATION	AS OF 31 JAN	1 JAN 67	AS OF 30 APRIL 67	(PLANNED AS OF 30 JUNE 67) (Arrival month of incoming units in parentheses)
NUI DAT	Stry A, 2/35th Arty	krty (155mm SF)	Btry A, 2/35th Arty (155mm SP)	Btry A, 2/35th Arty (155mm SP)
	HHB, Svc, Btry A, 1/ (8"/175um SP)	A, 1/83d Arty	HHB, Svc, Btry A, 1/83d Arty (8"/175mm SP)	HHB, Svc, Btry A, 1/83d Arty (8"/175mm SP)
PHU LOI	HHB, 23d Arty Gp	d	HHB, 23d Arty Gp	HB, 23d Arty Gp
	2/13th Arty (105mm T	Smar T)	2/13th Arty (105mm T)	2/13th Arty (105m T)
	HHB, Svc, Btry A, 2/ (155mm T) (See note)	A, 2/11th Arty note)		
			1 Plt, I Btry (SLT), 29th Arty	1 Fit, I Btry (SLT), 29th Arty
			Btry A (AWSP), 5th Bn, 2d Arty	Btry A (AWSP), 5th Bn, 2d Arty
				HHB, Swc, 1 FB, 1/27th Arty (155mm SP)
PHUOC VINH	HHB, C/6/27th Arty	rty (8"/175mm SP)	HHB, C/6/27th Arty (8"/175mm SP)	HHB, C/6/27th Arty (8"/175mmSF)
QUAN LOI			Btry A, 6/27th Arty (8"/175mmSP)	Btry A, 6/27th Arty(8"/175 mmSP)
SUOI DA			Btry B, 2/32d Arty (8"/175mm SP)	Btry B, 2/52d Arty(8"/175mmSP)
TAY NINH	Btry C, 2/32d Arty	rty (8"/175mm SP)	HHB, Svc, Btry C, 2/32d Arty (8"/175mm SP)	HHB, Svc, Btry C, 2/32d Arty (8"/175mm SP)
				1 FB, 1/27th Arty (155mm SP)

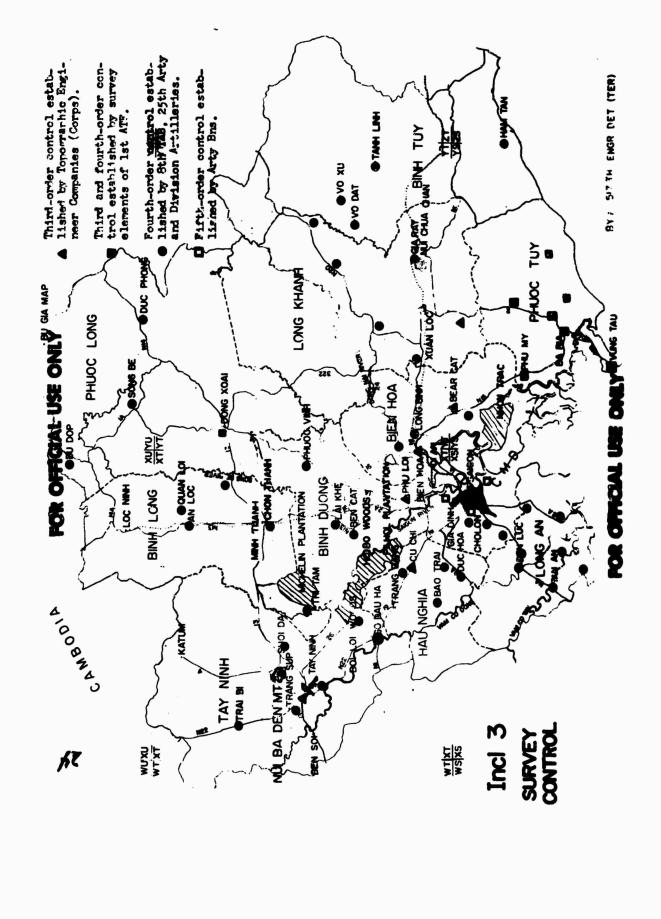
SECRET

	30 JUNE 67)	(Besen)	A.B	101 /475 OT	2/35th Arty
	(PLANNED AS OF 30 JUNE 67) (Arrival month of incoming	mitte in paren	HHB, 54th Arty Gp		HHB, Btrys B, C, 2/35th Arty (155mm ep)
うこうこ	AS OF 30 APRIL 67		IRB, 54th Arty Gp	Btry C, 1/83d Arty (8"/175mm SP)	HHB, BtrysB, C, 2/35th Arty (155mm SP)
	AS OF 31 JAN 67		HIB, 54th Arty Gp	Btry C, 1/83d Arty (8"/175mm SF)	HHB, Btry B, 2/35th Arty (155mm SP)
	LOCATION		XUAN LOC		

NOTE: 2d Battalion, 11th Artillery departed III CTZ on 19 April 1967 for deployment to I CTZ on Operation OREGON.

SECRET





CONFIDENTIAL

DEPARTMENT OF THE ARMY
Headquarters, II Field Force Vietnam Artillery
APO San Francisco 96266

After Action Report (Project Wayside) (U)

1. (C) Background Information:

- a. Artillery units deployed to South Vietnam initially operated without survey or with limited survey control based on assumed local data. The Engineer Topographic Company and the Field Artillery Target Acquisition Battery established survey control for all US artillery in base camps by the end of January 1967. Target area survey was non existent and very limited survey control existed for artillery units on operations out of base camp locations.
- b. USARV submitted a proposal to provide a solution to the problem of inadequate survey control. II FFORCEV stated that the proposal appeared to be highly desirable and should be initiated immediately.
- c. CG USARV directed II FFORCEY to select an area and to conduct a test of the photogrammetric concept of providing survey control points. The area known as "War Zone C" was selected.

2. (C) Conduct of the Test

- a. The photogrammetric material, consisting of XYZ coordinates of control points, photographs, overlays, and trig lists was received in January 1967.
- b. The 8th Battalion 25th Artillery Target Acquisition Battery checked the coordinates of three photogrammetric points by conventional survey methods. There was an average discrepancy of 9 meters northing 11 meters easting and 9 meters in height from surveyed coordinates. A preliminary firing test utilizing a light and heavy artillery battery was also conducted with satisfactory results.
- c. The evaluation of the photogrammetric proposal was conducted juring the period 31 January 4 April 1967 using six light, six medium, and three heavy artillery batteries participating in Operation "Junction City".
- d. The use of photogrammetric survey control produced the following results:

INCLOSURE 4

23 CONFIDENTIAL

CONFIDENTIAL

After Action Report (Project Wayside) (U)

- (1) Artillery batterics were provided with data which allowed registration on common surveyed points and facilitated massing of fires.
- (2) The first round accuracy of artillery was increased and resulted in saving of rounds during adjustment.
- (3) Targets were attacked in areas containing photogrammetric control with minimum adjustment thus exploiting the element of surprise.
 - e. The following points were noted during the conduct of the test:
- (1) The 1:12,500 and 1:5,000 scale photographs were too unwieldy for use by serial observers.
- (2) Photogrammetric information on 1:25,000 scale pictomaps necessitated two sets of maps, since the fire direction maps and equipment are 1:50,000 scale.
- (3) Registrations/checkpoints on the photographs using vegetation were most difficult to identify.
- (4) The network of position area, registration and check points was not of sufficient density and there were large areas without a survey control point. A density of one point each 2000 meters is desirable.
- (5) The survey control points were classified as position areas, registration and checkpoints. This was not necessary as all points can be used for either purpose.
- (6) The coordinates of photogrammetric positions should be on front of photographs for convenience.
- (7) The numbering system used for the photogrammetric points precluded rapid matching of photos and overlays. The points have to be checked against the mission number on the legend of the overlays to select the proper photograph. Additionally, this created a filing problem.

3. (C) Conclusions:

- a. The photogrammetric concept is feasible and is a valuable supplement to conventional survey methods to provide survey control for III CTZ.
- b. The process provided a limited target area survey for the first time in III CTZ.
- c. The difficulties encountered were minor and presented no serious obstacles to conducting the test or using the data.



After Action Report (Project Wayside) (U)

- 4. (C) Recommendations:
- a. That the photogrammetric process be immediately extended to other areas of III CTZ where marginal survey control exists.
 - b. That all photography be of 1:25,000 scale.
 - c. That the photogrammetric overlays be 1:50,000 scale.
 - d. Survey control points be selected in the following priorities:
 - (1) Road Junctions
 - (2) Junction of Roads and Streams
 - (3) Man made objects
 - (4) Prominent Hill messes
 - (5) Trail intersections
 - (6) Prominent curve in a Road
 - (7) Promiment bend in a Stream

25

CONFIDENTIAL

11 FFORCEV s. 920/1 - 67 A32

AVFBC-H

1st Ind

SUBJECT: Operational Report for Quarterly Period Ending 30 April 1967 Headquarters, II Field Force Vietnam Artillery(4)

DA, HQ II FFORCEV, APO San Francisco 96266 29 MAY 1967

THRU: Commanding General, USARV, ATTN: AVHCC-DH, APO 96307

Commander in Chief, US Army Pacific, ATTN: GPOP-MH, APO 96558

TO: Assistant Chief of Staff for Force Development, Dept of the Army, Washington, D.C. 20310

- 1. (U) Subject report is forwarded.
- 2. (3) Pertinent comments follows
- a. Reference Para A, page 13 of Section II, Part 2. Concur. The Army Material Command (AMC) has advised USAEV that Air Conditioner units are not authorized for the AE/GRC-46. AM/GRC-142 and AE/GRC-122 radio sets are issued in the priority indicated on the USAEV distribution plan. The forecast calls for distribution to arry units to commence 1st qtr FY 68 and to be completed by 2d qtr FY 68 providing procurement and shipping proceeds as planned.
- b. Reference Para B, page 13 of Section II, Part 2. Concur and recommend that 43 additional countermortar detachments be reinstated in the troop program.
- c. Beference Para C, page 15 of Section II, Part 2 concerning the requirement for additional aircraft: This headquarters recognizes a requirement. A shortage of aircraft presently exists in units authorized TOE aircraft and in some separate aviation units. These critical shortages preclude the issue of additional aircraft to artillery units at this time. II Field Force Vietnam (II FFORCEV), through the 12th Aviation Group, controls the assets of separate aviation units in its area, including surveillance airplane companies. Mission requirements beyond the capability of assigned aircraft will continue to be coordinated by 1I FFORCEV in accordance with priorities established by this headquarters.

2 Incl 12 USARPAG S-67_177|

2 Incl 12 USARPAG S-67_4/4/8 OPT, AGC

SECRET

G4-C-67-1570

C-E 67-1007 1 58-2 Ju/ARV678-1908

AVHGC-DST (15 May 67)

2d Ind

SUBJECT: Operational Report-Lessons Learned for the Period Ending

30 April 1967 (RCS CSFOR-65) (U)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96307 .7 JUL 1967

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-OT APO 96558

1. (U) This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 30 April 1967 from Headquarters, II Field Force Vietnam Artillery as indorsed.

2. (S) Pertinent comments follow:

- a. Reference item concerning calibration of artillery pieces, paragraph B7b, page 8; and paragraph E, page 14: An additional calibration capability is not available in-country nor is an additional capability provided for in Program 4. Since the present calibration team apparently furnishes adequate support a request for an additional team would fall in a non-essential category. However, another calibration team has been requested from Okinawa and II Field Force has been notified.
- b. Reference item concerning photogrammetry, paragraph 7c(2), page 9; and paragraph D, page 14: The concept was forwarded to MACV with a recommendation for adoption and requirements are now being established for specific areas of operational interest applicable to photogrammetric control. III CTZ inaccessible areas are being included in the program.
- c. Reference item concerning utilization of the M42 as a maneuver vehicle, page 11: Concur. USARV message AVHGD-MD 38387, DTG 020145Z December 1966 advised units of maintenance and supply support problems and recommended close and continuous control be established over operation and maintenance to avoid non-essential use.
- d. Reference item concerning problems encountered with BA-200/U, page 12: At the present time, there are adequate stocks of BA-200/U batteries in country. Although temporary shortages of certain batteries may occur at one or more sites, cross-leveling of in country stocks generally corrects the shortage. Emergency procedures are available for obtaining assets on an expedited basis from USARPAC. The automatic resupply system of batteries reduces exposure to extreme heat and humidity to the minimum.
- e. Reference item concerning Radio Set AN/GRC-46, paragraph A, page 13; and paragraph 2a, 1st Indorsement: Concur with unit recommendation. Due to conditions of heat and humidity, it is strongly recommended

G3-S-67_ 177[

G4-S-67- 177]

Cy. 1 of 5 cys

Pg. 1 of 2 Pgs

G-8: 67-1007

ARV67S- 1908

AVHGC-DST (15 May 67) 2d Ind SUBJECT: Operational Report-Lessons Learned for the Period Ending 30 April 1967 (RCS CSFOR-65) (U)

that consideration be given to providing air conditioning for AN/GRC-46 radio shelters. This Headquarters is advised that the earliest availability date of the AN/GRC-142 and 122 radios is late 2d Quarter of FI 68.

FOR THE COMMANDER:

1 Incl nc E. J. KENNEDY C. T., AGC

Asst Adjutant General

SECRET

Cy of Scys
Pg 3 of Pgs

GPOP-DT(15 May 67)

3d Ind (S)

SUBJECT: Operational Report-Lessons Learned for the Period Ending 30 April 1967 (RCS CSFOR-65), HQ II FPV Arty

HQ, US ARMY, PACIFIC, APO Sen Francisco 96558 4 AUG 1967

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D. C. 20310

- (S) This headquarters has reviewed subject report and concurs in the report, as indorsed, with the following comments:
- a. Reference paragraph 2e, 2d indorsement. The present forecast for introduction of the AN/GRC-142 and AN/GRC-122 is 65 per month beginning in October 1967. Since these radios are replacements for the AN/GRC-46, non-concur in authorizing air conditioning for the AN/GRC-46.
- b. Reference paragraph 2a, 2d indorsement. USARPAC Materiel Management Agency message 19190, DTG 140410E to CG WECOM contains the mission support plan for the Radar Chronograph. This equipment, scheduled for distribution in 3d Quarter FY 68, provides organic calibration capability down to and including Division Artillery. WECOM was requested to provide the impact which this equipment would have on the present calibration teams in theater. Receipt of this equipment will solve calibration problems in USARV.

FOR THE COMMANDER IN CHIEF:

HEAVRIN SAYDER

CPT, AGC

Asst AG

1 Incl

29 HQ USARPAC 2711357
SECRET G3-S-67 1771